

NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

Canada.—Montreal, January 12.—Several thousand unemployed found work to-day clearing [snow from streets as a result of the] blizzard last night. Drifts were 8 feet deep in places.—*New York Herald, January 12, 1922.*

Newfoundland.—St. Johns, January 25.—A blizzard which has raged in Newfoundland for the last 24 hours, piling up huge drifts, and the intense cold have resulted in the closing of many harbors. * * * The steamer *Stella Maris*, caught in the ice in Bonne Bay, was held so fast that it was believed there was little chance of her being able to get out before spring.—*New York Herald, January 26, 1922.*

Portugal.—Lisbon, January 21.—More than 50 deaths and incalculable damage to shipping, in addition to the unroofing of houses and uprooting of trees, resulted from the storm which swept Portugal early in the week. Reports from the northern Provinces have only just been received, as they were delayed through the breaking of communications. Many ships were driven aground by the gale.—*Chicago Post, January 21, 1922.*

Italy.—The exceptional drought and its serious consequences are still the topic of the day in northern Italy, says the *London Times*. In the Trentino the water of a lake has fallen so much that a small island never seen before within living memory has appeared in the middle. From an inscription on a stone on this island, the people learn that a great drought occurred in 1806 and that in

that year, too, the small island emerged from the water. Father Gaddoni, of Imola, says that one must go back to the year 1621 to find another drought in the Po Valley similar to the present one.—*New York Evening Mail, January 20, 1922.*

Russia.—Riga, January 25.—Navigation has been suspended in the Gulf of Riga on account of ice, and shipping has become exceedingly difficult in the port of Reval.—*New York Herald, January 26, 1922.*

China.—The Yellow River, which created such havoc last August, has once more deserted its bed, carrying destruction to 13 Provinces. So sudden was the rise that the inhabitants were not able to get out of the way; whole villages were washed down the river and thousands of people were drowned. Great tracts were flooded in Shantung, Kiansu, and Ahnwei. The submerged area was estimated at about 10,000 square miles.—*The Pathfinder, January 14, 1922.*

Hawaii.—An iceberg, said to have been exposed 200 feet in length and rising 10 feet out of the water, was seen by passengers of the steamship *Shinyo Maru*, 25 hours out of Honolulu, on January 10 * * *.

This is believed to be the first time an iceberg has been seen off the Hawaiian Islands.—*Evening Star, Washington, D. C., January 16, 1922.*

Panama.—Panama, January 4.—Torrential rains have flooded the River Tuira, in the Province of Darien, and the villages of Pinogana and Yavisa are inundated.—*Washington Post, January 5, 1922.*

DETAILS OF THE WEATHER IN THE UNITED STATES.

GENERAL CONDITIONS.

The features which give individuality to the month were the persistence of anticyclones over the Great Basin region which seemed to be a point of concentration and of subsequent dispersion of anticyclones; uniformly high mean pressure in all parts of the country; irregular distribution of mean temperature and precipitation and at least three severe cyclonic storms, one of which No. IV of Chart III was the direct cause of much property loss along the middle Atlantic coast and No. XII which gave the remarkably heavy snow in the States of North Carolina, Virginia, Maryland, Delaware, the District of Columbia, and southeastern Pennsylvania.

The usual details follow.

CYCLONES AND ANTICYCLONES.

By W. P. DAY, Observer.

There was much similarity between the number and the predominating types of both HIGHS and LOWS in January as compared with December. The Plateau HIGH was persistent during much of the month. The unusual path of the Alberta HIGH of the 22d-31st which turned back on itself over Ontario was due to a reinforcement of pressure from the Hudson Bay region just as the Alberta HIGH was about to disintegrate. The two most severe storms of the month occurred off the middle Atlantic coast on the 11th and the 28th. The latter storm was halted off the Virginia Capes and turned at right angles to its previous path by the reinforcement of the previously mentioned HIGH (22d-31st).

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Low.	Al- berta.	North Pa- cific.	South Pa- cific.	North- ern Rocky Moun- tain.	Colo- rado.	Texas	East Gulf.	South At- lantic.	Central.	Total.
January, 1922.....	8.0	1.0	2.0	.....	3.0	1.0	1.0	1.0	.....	17.0
Average number, 1892-1912, in- clusive.....	4.7	2.5	0.9	0.4	1.4	1.5	0.4	0.4	0.5	12.7

Highs.	North Pacific.	South Pacific.	Al- berta.	Plateau and Rocky Moun- tain region.	Hud- son Bay.	Total.
January, 1922.....	3.0	1.0	5.0	.....	.....	9.0
Average number, 1892-1912, inclusive	0.8	0.6	5.5	1.7	0.4	9.0

FREE-AIR CONDITIONS.

By W. R. GREGG, Meteorologist.

Beginning with January, 1922, and monthly thereafter, there will appear in each number of the REVIEW a brief summary of the free-air conditions during that month, as observed by means of kites, balloons, airplanes, etc. The main purpose will be to discuss these conditions in relation to those at the surface and in relation to *normal* values at different levels—in effect, to present a review or survey of free-air conditions while they are still of current interest.

Table 1 gives for January the average values of temperature, relative humidity, and vapor pressure, together with departures from normal, and Table 2, resultant winds and normals, as determined from observations